

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A Method for randomly storing data on at least one of the group consisting of data storage networks, ~~and/or~~ an intranet, ~~and/or the~~ an Internet, characterized in that a quantity of data blocks  $D_i$  ( $i=1, \dots, m$ ) is allocated to a quantity of data storage systems  $S_j$  ( $j=1, \dots, n$ ) pursuant to the following steps and stored there:
  - a) allocating a virtual storage space ~~is allocated~~ to an overall quantity of data storage systems and at least one partial space  $I_j$  of the virtual storage space to each individual data storage system  $S_j$  ( $j=1, \dots, n$ ) by an initial random process, whereby the relationship between the partial space  $I_j$  and the overall virtual storage space at least approximately matches the relationship of the values of a presettable parameter relating to the data storage system  $S_j$  or the overall quantity of data storage systems,
  - b) allocating a (random) element  $h(i)$  of the virtual storage space ~~is allocated~~ to each data block  $D_i$  ( $i=1, \dots, m$ ) by means of a second random process,
  - c) determining for each data block  $D_i$  ( $i=1, \dots, m$ ) at least one partial space  $I_k$  containing  $h(i)$  ~~is determined~~ and allocating the data block  $D_i$  ~~is allocated~~ to at least one of the data storage systems  $S_k$  represented by this (these) partial data space(s)  $I_k$  and stored there.
2. (Currently amended) The Method according to ~~one of the C~~laims 1, characterized in that with at least one of an initial random process and/or a second random process, pseudo-random functions are applied.
3. (Currently amended) The Method according to ~~one of the C~~laims 1 ~~or~~ 2, characterized in that wherein said data storage systems  $S_j$  ~~whose~~ has a value  $c_j$  of the presettable parameter that exceeds a second value  $\delta$  that is also presettable, ~~are~~ is fragmented into

$\left\lfloor \frac{c_j}{\delta} \right\rfloor$  new virtual data storage systems  $S_j$ , ~~wherein with value~~  $c_j = \delta$  and ~~if~~ wherein  
~~when~~  $c_j = \left\lfloor \frac{c_j}{\delta} \right\rfloor * \delta \neq 0$ ,  ~~$S_i$  is fragmented~~ into another virtual data storage system  $S_k$   
~~wherein with~~  $c_k = c_j - \left\lfloor \frac{c_j}{\delta} \right\rfloor * \delta$  and in each case at least one partial space  $I_j$ , or  $I_k$  of the  
 virtual storage space is allocated to ~~these~~ the virtual data storage systems by means of a  
 random process, whereby  $[a]$  describes the integral part of a number  $a \in \mathbb{R}$ .

4. (Currently amended) ~~The M~~method according to ~~one of the aforementioned~~ Claim 1, characterized in that the virtual storage space is represented by the interval  $[0, 1)$  and the partial spaces  $I_j$  by at least one partial interval contained in  $[0, 1)$ .
5. (Currently amended) ~~The M~~method according to ~~one of the aforementioned~~ Claim 1, characterized in that in the initial random process the left edge of the interval  $I_j$  is determined by the application of an initial hash function and the length of the interval is calculated in accordance with  $(g(j) + s * c_j)$  ~~wherein with:~~  
 $c_j$ : equals a value of the parameter relating to the data storage system and  
 $s$ : equals a stretch factor, selected in such a way that  $s * c_j < 1$  is fulfilled.
6. (Currently amended) ~~The M~~method according to ~~one of the aforementioned~~ Claim 1, characterized in that the stretch factor  $s$  is selected in a manner that the interval  $[0, 1)$  is completely covered over by the partial intervals  $I_j$ .
7. (Currently amended) ~~The M~~method according to ~~one of the aforementioned~~ Claim 1, characterized in that in the second random process a number  $h(i) \in [0, 1)$  is allocated to each data block  $D_i$  ( $i=1, \dots, m$ ) by means of ~~an~~the application of a second hash function  $h(i)$ .

8. (Currently amended) ~~The m~~Method according to ~~one of the aforementioned C~~laims 1, characterized in that the presetable parameter is selected from the group consisting of:
- ~~-describes the~~a physical capacity of data storage systems, ~~or~~
  - ~~the a~~a request load of data storage systems ~~or~~and
  - correct ~~{sie}~~ deviations from the desired distribution.
9. (Currently amended) ~~The M~~Method according to ~~one of the aforementioned C~~laims 1, characterized in that ~~when in such a case that~~ the element  $h(i)$  is allocated to a data block  $D_i$  is contained in multiple partial spaces  $I_j$  a uniform placement strategy is applied in order to allocate the data block  $D_i$  to one of the data storage spaces represented by the partial spaces  $I_j$ .
10. (Currently amended) ~~The M~~Method according to ~~one of the aforementioned C~~laims 1, characterized in that ~~when~~with a changes occurs in at least one of the values  $C = (c_1, \dots, c_n)$  of the presetable parameter, a repeated allocation of the data blocks  $S_j$  ~~should~~ be carried out in accordance with the method ~~for randomly storing data pursuant to one of the C~~laims 1 through 9 while setting the new parameter values  $C' = (c'_1, \dots, c'_n)$  as the basis.
11. (Currently amended) ~~The M~~Method according to ~~one of the aforementioned C~~laims 1, characterized in that ~~with~~ when a changes occurs in at least one of the values  $C = (c_1, \dots, c_n)$  of the presetable parameter, a repeated allocation of the data blocks  $D_i$  to the data storage systems  $S_j$  is ~~only~~ carried out according to the method ~~for randomly storing data pursuant to one of the C~~laims 1 through 9 while setting the new parameter values  $C' = (c'_1, \dots, c'_n)$  as the basis if a new parameter value  $c'_i$  varies from the corresponding current parameter value  $c_i$  by a presetable constant  $\mu$ .
12. (Currently amended) ~~The M~~Method according to ~~one of the aforementioned C~~laims 1, characterized in that with changes in at least one of the values  $C = (c_1, \dots, c_n)$  of the

presettable parameter into a new parameter value  $C' = (c'_1, \dots, c'_n)$  a repeated allocation of the data blocks  $D_i$  to the data storage spaces is carried out in stages  $S_j$  according to the method ~~for randomly storing data pursuant to one of the Claims 1 through 9~~, whereby at each stage  $k$  intermediate parameter values  $C^k = (c^k_1, \dots, c^k_n)$  with  $|c_i - c^k_i| \neq |c_i - c'_i|$  ( $i = 1, \dots, n$ ) are set as the basis.

13. (Currently amended) ~~The Method~~ according to ~~one of the aforementioned Claims 1~~, characterized in that ~~when~~for storing data blocks in a storage medium at least one table ~~is~~should be prepared in which the allocation between virtual address and physical address on the storage medium is stored.
14. (Currently amended) ~~The method~~ according to Claims 13, characterized in that multiple data blocks are summarized in an extent to which is allocated in the table a common physical address on the storage medium, ~~wherein~~by the data blocks of an extent are linked with each other in the a logical address space by ~~at~~the first data block of an extent that consists of  $2^\lambda$  obtaining an address in the form  $x00\dots000$ , whereby the lower  $\lambda$  bits are represented by the number zero, the last block of ~~this the~~ extent receives anthe address  $x11\dots111$ , whereby the lowest  $\lambda$  bits are represented by means of the number one, and ~~the a~~ physical position of a data block is derived by ~~means of an~~ adding up of the table entries for the respective~~said~~ extent to the last  $\lambda$  bits of ~~said~~the logical address of the data block.
15. (Currently amended) An Arrangement with at least one processor that is equipped in such a manner that a method for randomly storing data on at least one of the group consisting of storage networks, ~~and/or on an intranet and/or on the an~~ Internet is executable, whereby the randomized storage of data includes the steps of the method ~~pursuant to one of the Claims 1 through 14~~.

16. (Currently amended) The Arrangement according to Claim 15, characterized in that the arrangement includes at least one of the items selected from the group consisting of
- ~~at least one a~~ data storage medium, ~~and/or~~
  - ~~at least one a~~ computer system that ~~accesses(es)~~ by reading and/or by writing to ~~the a~~ storage media, ~~and/or~~
  - ~~at least one a~~ controller unit switched in between ~~a the~~ computer system(s) and ~~the in between the computer system(s) and~~ the method for randomly storing data.
17. (Currently amended) The Arrangement according to Claim 16, characterized in that the data storage system includes at least on the group consisting of
- hard drive surfaces ~~and/or~~
  - intermediate storage spaces used as web caches.
18. (Currently amended) The Arrangement according to ~~one of the Claims 15 through 17~~, characterized in that the arrangement includes at least one controller unit switched in between ~~a the~~ computer system(s) and ~~the a~~ data storage system(s) for controlling ~~a the~~ method of randomly storing data.
19. (Currently amended) The Arrangement according to Claim 18, characterized in that the arrangement ~~at least~~ includes a computer system that accesses ~~the a~~ storage media via a the controller unit.
20. (Currently amended) The Arrangement according to ~~one of the Claims 15 through 19~~, characterized in that the method for randomly storing data is implemented as a hardware RAID method in ~~a the~~ controller unit.
21. (Currently amended) The Arrangement according to ~~one of the Claims 15 through 20~~, characterized in that the arrangement includes

- at least one dedicated computer system (~~SAN appliance~~) that is linked via data exchange means with storage media and computer systems ~~of the arrangement~~ for coordinating the storing of data and/or processor resources (~~in-band appliances~~) linked via means for data exchange with storage media and computer systems ~~of the arrangement~~ for distribution of data blocks.

22. (Currently amended) The Arrangement according to ~~one of the C~~laims 15 through 21, characterized in that the arrangement includes heterogeneous storage media.

23. (Currently amended) A Computer program product that includes a computer-readable storage medium on which is stored a program that enables a computer, once it has been loaded into the memory of the computer, to perform a method for randomly storing data on at least one the group consisting of data networks, ~~and/or~~ an intranet and ~~or the an~~ Internet, whereby the randomized data storage includes steps of the method pursuant to ~~one of the C~~laims 1 through 14.

24. (Currently amended) A Computer-readable storage medium, on which a program is stored that enables a computer, after it has been loaded into the memory of the computer, to perform a method for randomly storing data on at least one of the group consisting of storage networks, ~~and/or on~~ an intranet and ~~or on the an~~ Internet, whereby the randomized data storage includes ~~the steps of the method pursuant to one of the C~~laims 1 through 14.